Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A bag for use in centrifugal processing comprising:

a substantially circular enclosure including a first side and a second side radially connected to the first side along an outer edge, the first and second sides defining an interior surface therebetween, at least one of the first and second sides having a central opening for housing a central hub; and

a first reinforced mating portion positioned adjacent to the central opening, along the interior surface of at least one of the first and second sides, and extending in a direction perpendicular to the interior surface, the first reinforced mating portion integrally formed for mating in a cooperative arrangement with a corresponding second mating portion of a hub.

2. (Currently amended) The bag according to claim 1, wherein the first reinforced mating portion comprises an integrally molded radial barrier extending away from the interior surface adjacent to the central opening.

3. (Currently amended) The bag according to claim 1, wherein the first reinforced mating portion comprises one or more recesses formed adjacent the opening extending in toward the interior surface adjacent to the central opening and wherein the corresponding second mating portion is received by the one or more recesses.

4. (Currently amended) The bag according to claim 1, wherein the first reinforced mating portion comprises one or more raised areas formed adjacent the opening and wherein the corresponding second mating portion receives the one or more raised areas.

5. (Currently amended) The bag according to claim 2, wherein the integrally molded radial barrier comprises a solid circumferential ring of raised material.

6. (Currently amended) The bag according to claim 2, wherein the integrally molded radial barrier comprises a circumferential recess.

7. (Previously presented) The bag according to claim 1, wherein each of the first and second sides has a respective central opening for housing a respective side of the hub.

8. (Currently amended) The bag according to claim 7, wherein each of the first and second sides includes a respective first reinforced mating portion positioned adjacent to the central opening along the interior surface of each respective side, each respective first reinforced mating portion extending in a direction perpendicular to the respective interior surface and integrally formed for mating in a cooperative arrangement with a corresponding second mating portion of a respective side of the hub.

9. (Currently amended) The bag according to claim 8, wherein each reinforced ~~first~~ mating portion comprises one or more recesses extending in toward the interior surface and formed adjacent to the respective opening and wherein a respective corresponding second mating portion is received by the one or more recesses.

10. (Currently amended) The bag according to claim 7, wherein each reinforced ~~respective first~~ mating portion comprises one or more raised areas extending away from the interior surface and formed adjacent to the respective opening and wherein a respective corresponding second mating portion receives the one or more raised areas.

11. (Currently amended) The bag according to claim 1, wherein the bag is usable in a centrifugal processor [[used]] as either or both of a processing and/or expresser bag.

12. (Original) The bag according to claim 7, further comprising at least one weld ring having a central opening for receiving a first side of the hub and a surface positioned adjacent the first side of the bag proximate the opening of the first side.

13. (Currently amended) A bag for use in centrifugal processing comprising:

a substantially circular enclosure including a first side and a second side radially

connected to the first side along an outer edge, the first and second sides defining an interior surface therebetween, at least one of the first and second sides having a central opening for housing a central hub;

a first reinforced mating portion positioned adjacent to the central opening, along the interior surface of at least one of the first and second sides, and extending in a direction perpendicular to the interior surface; and

a hub having a second mating portion corresponding to the first reinforced mating portion, wherein the first reinforced mating portion is integrally formed for mating in a cooperative arrangement with the second mating portion.

14. (Currently amended) The bag according to claim 13, wherein the first reinforced mating portion comprises an integrally molded radial barrier extending away from the interior surface adjacent to the central opening.

15. (Currently amended) The bag according to claim 13, wherein the first reinforced mating portion comprises one or more recesses formed adjacent to the opening extending in toward the interior surface adjacent to the central opening and wherein the corresponding second mating portion is received by the one or more recesses.

16. (Currently amended) The bag according to claim 13, wherein the first reinforced mating portion comprises one or more raised areas formed adjacent to the opening and wherein the corresponding second mating portion receives the one or more raised areas.

17. (Currently amended) The bag according to claim 14, wherein the integrally molded radial barrier comprises a solid circumferential ring of raised material.

18. (Currently amended) The bag according to claim 14, wherein the integrally molded radial barrier comprises a circumferential recess.

19. (Previously presented) The bag according to claim 13, wherein each of the first and second sides has a respective central opening for housing a respective side of the hub.

20. (Currently amended) The bag according to claim 19, wherein each of the first and second sides includes a respective first reinforced mating portion positioned adjacent to the central opening along the interior surface of each respective side, each respective first reinforced mating portion extending in a direction perpendicular to the respective interior surface and integrally formed for mating in a cooperative arrangement with a corresponding second mating portion of a respective side of the hub.

21. (Currently amended) The bag according to claim 20, wherein each reinforced ~~first~~ mating portion comprises one or more recesses extending in toward the interior surface and formed adjacent to the respective opening and wherein a respective corresponding second mating portion is received by the one or more recesses.

22. (Currently amended) The bag according to claim 20, wherein each reinforced ~~respective first~~ mating portion comprises one or more raised areas extending away from the interior surface and formed adjacent to the a respective opening and wherein a respective corresponding second mating portion receives the one or more raised areas.

23. (Original) The bag according to claim 19, further comprising at least one weld ring having a central opening for receiving a first side of the hub and a surface positioned adjacent the first side of the bag proximate the opening of the first side.

24. (Currently amended) A centrifuge comprising:

one or more bags for housing a material to be separated, wherein each bag comprises:

a substantially circular enclosure including a first side and a second side radially connected to the first side along an outer edge, the first and second sides defining an interior surface therebetween, at least one of the first and second sides having a central opening for housing a central hub;

a first reinforced mating portion positioned adjacent to the central opening, along the interior surface of at least one of the first and second sides, and extending in a direction perpendicular to the interior surface; and

one or more corresponding hubs, wherein each hub includes a second mating portion corresponding to the first reinforced mating portion of a respective bag, wherein the first reinforced

mating portion is integrally formed for mating in a cooperative arrangement with the second mating portion.

25. (Currently amended) The centrifuge according to claim 24, wherein the first reinforced mating ~~treating~~ portion comprises an integrally molded radial barrier extending away from the interior surface adjacent to the central opening.

26. (Currently amended) The centrifuge according to claim 24, wherein the first reinforced mating portion comprises one or more recesses formed adjacent to the opening extending in toward the interior surface adjacent to the central opening and wherein the corresponding second mating portion is received by the one or more recesses.

27. (Currently amended) The centrifuge according to claim 24, wherein the first reinforced mating portion comprises one or more raised areas formed adjacent to the opening and wherein the corresponding second mating portion receives the one or more raised areas.

28. (Currently amended) The centrifuge according to claim 25, wherein the integrally molded radial barrier comprises a solid circumferential ring of raised material.

29. (Currently amended) The centrifuge according to claim 25, wherein the integrally molded radial barrier comprises a circumferential recess.

30. (Currently amended) A method of sealing a centrifuge bag to a hub, comprising:

providing a bag for use in centrifugal processing, wherein the bag comprises a substantially circular enclosure including a first side and a second side radially connected to the first side along an outer edge, the first and second sides defining an interior surface therebetween, at least one of the first and second sides having a central opening for housing a central hub, wherein the central opening includes a first reinforced mating portion positioned adjacent to the central opening, along the interior surface of at least one of the first and second sides, and extending in a direction perpendicular to the interior surface;

providing a hub having a second mating portion corresponding to the first reinforced

mating portion, wherein the first reinforced mating portion is integrally formed for mating in a cooperative arrangement with the second mating portion;

placing the hub within the opening;

applying a layer of an adhesive material to at least one of the first reinforced mating portion and the second mating portion; and

mating the first reinforced mating portion with the second mating portion; curing the adhesive material.

31. (Canceled)

32. (Original) The method according to claim 30, wherein curing comprising applying at least one of heat, ultraviolet light and/or pressure to the mating portions.

33. (Original) The method according to claim 30, further comprising applying a layer of the adhesive around all or a portion of the opening.

34. (Currently amended) A method of sealing a centrifuge bag to a hub, comprising:

providing a bag for use in centrifugal processing, wherein the bag comprises a substantially circular enclosure including a first side and a second side radially connected to the first side along an outer edge, the first and second sides defining an interior surface therebetween, at least one of the first and second sides having a central opening for housing a central hub, wherein the central opening includes a first reinforced mating portion positioned adjacent to the central opening, along the interior surface of at least one of the first and second sides, and extending in a direction perpendicular to the interior surface;

providing a hub having a second mating portion corresponding to the first reinforced mating portion, wherein the first reinforced mating portion integrally formed for mating in a cooperative arrangement with the second mating portion;

placing the hub within the opening; and

mating the first reinforced mating portion with the second mating portion.

35. (Currently amended) The method according to claim 34, wherein mating comprises welding the first reinforced mating portion to the second mating portion.

36. (Original) The method according to claim 34, further comprising providing at least one weld ring having a central opening for receiving a first side of the hub and a surface positioned adjacent the first side of the bag proximate the opening of the first side.

37. (Original) The method according to claim 36, wherein mating comprises welding the weld ring to the hub.

38. (Currently amended) The method according to claim 34, wherein mating comprises adhering the first reinforced mating portion to the second mating portion using at least one of heat, solvent bonding, pressure, ultra-violet light and adhesive.

39. (Withdrawn) A hub for use with a centrifugal bag comprising one or more channels for directing fluids into and/or out of a centrifuge bag, and an integrally formed first mating portion for mating with a corresponding second mating portion of the centrifuge bag.

40. (Withdrawn) The hub according to claim 39, wherein the first mating portion comprises an integrally molded radial barrier.

41. (Withdrawn) The hub according to claim 39, wherein the first mating portion comprises one or more recesses and wherein the corresponding second mating portion is received by the one or more recesses.

42. (Withdrawn) The hub according to claim 39, wherein the first mating comprises one or more raised areas farmed adjacent the opening and wherein the corresponding second mating portion receives the one or more raised areas.

43. (Withdrawn) The hub according to claim 40, wherein the radial barrier comprises a circumferential ring of raised material.

44. (Withdrawn) The hub according to claim 40, wherein the radial barrier comprises a circumferential recess.

45. (Withdrawn) The hub according to claim 39, wherein the hub includes a first side and a second side, and wherein each side include a respective first mating portion far mating with a respective second mating portion of each side of a centrifuge bag.

46. (Withdrawn) The hub according to claim 45, wherein the first mating portion comprises one or more recesses wherein a respective corresponding second mating portion is received by the one or more recesses.

47. (Withdrawn) The hub according to claim 45, wherein the first mating portion comprises one or more raised areas and wherein a respective corresponding second mating portion receives the one or more raised areas.

48. (Withdrawn) The hub according to claim 39, further comprising at least one weld ring having a central opening for receiving a first side of the hub and a surface positioned adjacent the second mating portion of the bag proximate the hub.